

Excel 2007 Intermediate

Educational Technology Center

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Resources for this class can be found at http://www.davis.k12.ut.us/district/etc/documents/excel_inter_doc.html

Quick Access Toolbar

- The **Quick Access Toolbar** is just to the right of the **Microsoft Office Button**.
- When the cursor is over a button, the name of the button is displayed.
- The options available when **Microsoft Office 2007** is first installed include Save, Undo, and Redo.

Customizing the Quick Access Toolbar

- To add an item, click on the **Customize Quick Access Toolbar** drop down arrow at the end of the **Quick Access Toolbar** and click on the desired item.
- Options with a check mark in front of them are displayed on the **Quick Access Toolbar**.
- To remove a button, click on the **Customize Quick Access Toolbar** drop down arrow at the end of the **Quick Access Toolbar** and click on the desired item. (This removes the checkmark from in front of the item.)
- To add a command button from the **Ribbon**, right click on the desired command button and choose **Add to Quick Access Toolbar**.
- To remove a command button that has been added to the **Quick Access Toolbar**, right click on the button on the **Quick Access Toolbar** and choose **Remove from Quick Access Toolbar**.



Customizing Excel

- Click on the **Microsoft Office Button** and then click on the **Excel Options** button at the bottom.
- **Popular** – Click on **Popular** to change options for creating new workbooks.
 - In the **When creating new workbooks** section, the font, font size, default view, and number of worksheets in a new workbook can be specified.
- **Formulas** – Click on **Formulas** to change options for formulas and error checking.
- **Proofing** – Click on **Proofing** to change **AutoCorrect** options.
- **Save** – Click on **Save** to change the **AutoRecover** options.
- **Advance** – Click on **Advanced** to change editing options and display options.
 - In the **Print** section, the **High quality mode for graphics** can be turned on to enhance the printing of graphics.
- Click on **OK**.

Keyboard Shortcuts

- Press the **Alt** key on the keyboard to display the keystrokes for the tabs and **Mini** toolbar.
- Press the desired key such as **H** for the **Home** tab.
- Continue pressing the indicated keys and/or down arrow to make the desired choices.
- To remove the keystroke markers from the screen, press the **Alt** key.

Moving Through the Spreadsheet

Keyboard Method

- Press the **Scroll Lock** key on the keyboard (top right side).
- The arrow keys on the keyboard now move the spreadsheet instead of moving from cell to cell.
- Press on the **Scroll Lock** key again to turn off this feature.

Scrolling Mouse

- Press the wheel on the scrolling mouse.
- Move the mouse (no clicking) and the spreadsheet moves.
- The farther from the marker, the faster the spreadsheet moves.
- To turn off this feature, left click or press on the wheel again.

Up and Down Arrow Keys

- **Arrow keys** - move one cell in the direction of the arrow.
- **Control → or Control ←** - moves to the next cell with information or to the far edge of the worksheet.

Page Up and Page Down Keys

- **Page Up and Page Down** - move one full screen at a time up or down through the worksheet.
- **Control Page Up and Control Page Down** - moves from worksheet to worksheet.

Status Bar

- The **Status Bar** is at the bottom of the window.
- Click and drag to highlight cells with numbers.
- Notice the right end of the **Status Bar**. It usually indicates several calculations with the selected numbers.
- Right click on the **Status Bar** and click to place a checkmark next to the desired items in the list.
 - **Average** – Displays the average of the selected numbers.
 - **Count** – Displays the number of cells selected that contain information.
 - **Numerical Count**– Displays the number of cells with numbers.
 - **Min** – Displays the smallest number in the selection.
 - **Max** – Displays the largest number in the selection.
 - **Sum** – Displays the total of the numbers in the selected cells.
- Click away from the window when finished.

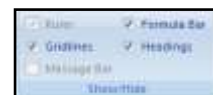
Worksheets

Renaming a Worksheet

- Double click on the worksheet tab.
- Type in the name.
- Press the **Enter** key.

Showing/Hiding Gridlines

- On the **Ribbon**, click on the **View** tab.
- In the **Show/Hide** group, a check mark in the **Gridlines** box indicates the gridlines are showing.
- Click in the **Gridlines** box to make a change.



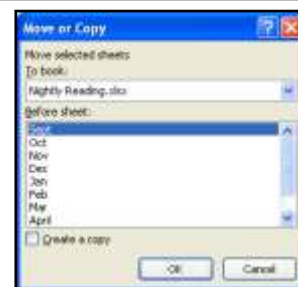
Coloring the Worksheet Tab

- Right click on the tab of the sheet.
- Click on **Tab Color...**
- Click on the desired color.
- **Note** – When the tab is selected, the color shows as a stripe at the bottom. When the tab is not selected, the entire tab shows the color.



Moving a Worksheet to another Workbook

- Be sure both workbooks are open.
- Right click on the tab of the worksheet and choose **Move or Copy...**
- Click on the down arrow below **To book** and choose the destination workbook.
- In the **Before sheet** window, choose the worksheet it should come before.



Copying a Worksheet within the Workbook

- Click on the tab of the worksheet to be copied.
- Hold down the **Control** key while clicking and dragging the worksheet to the side.
- Release the **Control** key when the worksheet is successfully copied.

Copying a Worksheet to another Workbook

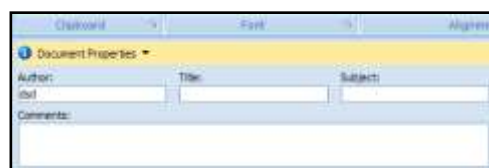
- Be sure both workbooks are open unless the sheet is being moved to a new workbook.
- Right click on the tab of the worksheet and choose **Move or Copy...**
- Click to select **Create a copy** at the bottom of the window.
- Click on the **To book** down arrow and choose the destination workbook.
- In the **Before sheet** window, choose the worksheet it should come before.
- Click on **OK**.

Group Column/Row Adjustments

- Multiple columns can be adjusted to have the same width.
- Multiple rows can be adjusted to have the same height.
- Columns
 - Click and drag over the letters of the columns (top edge) to highlight the desired columns.
 - Move the cursor to a line between the column letters at the top (two-headed arrow).
 - Click and drag to adjust the width of the column.
- Rows
 - Click and drag on the numbers of the rows (left edge) to highlight the desired rows.
 - Move the cursor to a line between the row numbers at the left (two-headed arrow).
 - Click and drag to adjust the height of the row.
- When the mouse button is released, the selected group adjusts to the same width/height.

Document Properties

- **Document Properties** contain hidden information in the spreadsheet such as the name of the author, the title, and keywords.
- Properties may be edited to remove information.
- Click on the **Microsoft Office Button**.
- Place the cursor over **Prepare** and then click on **Properties**.
- Click in the box of the information to be altered and make the desired changes.
- To close the **Document Properties** window, click on the **X** at the top on the far right.



Hiding and Unhiding Rows, Columns, or Sheets

Row(s)

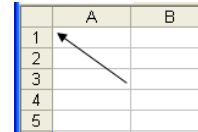
- To hide a row, click in a cell of the row to be hidden.
 - On the **Ribbon**, click on the **Home** tab.
 - In the **Cells** group, click on the **Format** button and choose **Hide & Unhide → Hide Rows**.
 - OR right click on the row indicator and choose **Hide**.
- **Note** - Click and drag to select several cells in a column to select several rows to be hidden.
- To unhide a row, click and drag to highlight cells above and below the hidden row(s).
 - On the **Ribbon**, click on the **Home** tab.
 - In the **Cells** group, click on the **Format** button and choose **Hide & Unhide → Unhide Rows**.

Column(s)

- To hide a column, click in a cell of the column to be hidden.
 - On the **Ribbon**, click on the **Home** tab.
 - In the **Cells** group, click on the **Format** button and choose **Hide & Unhide → Hide Columns**.
 - OR right click on the column indicator and choose **Hide**.
- **Note** - Click and drag to select several cells in a row to select several column(s) to be hidden.
- To unhide a column, click and drag to highlight cells above and below the hidden column(s).
 - On the **Ribbon**, click on the **Home** tab.
 - In the **Cells** group, click on the **Format** button and choose **Hide & Unhide → Unhide Columns**.

Unhiding the Row 1 or Column A

- Click on the cell above the row 1 indicator. (See illustration.)
- This will select the entire worksheet.
- On the **Ribbon**, click on the **Home** tab.
- In the **Cells** group, click on the **Format** button and choose **Hide & Unhide → Unhide Rows (Columns)**.



Sheet(s)

- To hide a sheet, click on the tab of the sheet to be hidden.
 - On the **Ribbon**, click on the **Home** tab.
 - In the **Cells** group, click on the **Format** button and choose **Hide & Unhide → Hide Sheets**.
 - OR right click on the sheet tab and choose **Hide**.
- To unhide a sheet,
 - On the **Ribbon**, click on the **Home** tab.
 - In the **Cells** group, click on the **Format** button and choose **Hide & Unhide → Unhide Sheets**.
 - Select the sheet to unhide.
 - Click on **OK**.



Special Pasting

- Several special pasting features are available by clicking on the **Paste** down arrow .
- Copy the cells that have the information, formatting, or other information desired.
- Click in the cell where the information or formatting is to be pasted.
- Click on the **Paste** down arrow and choose
 - **Paste** – Performs a regular paste.
 - **Formulas** – Pastes just the formulas.
 - **Paste_Values** – Pastes the numbers shown in the cells without the formulas which created them.
 - **No Borders** – Performs a regular paste without any borders.
 - **Transpose** – Pastes rows as columns and columns as rows.
 - **Paste_Link** – Performs what appears to be a regular paste but links the cells so that changes made in the original cell(s) are communicated to the pasted cells.
 - **Paste Special...** - Allows various options for pasting through choices in a window.
 - **Paste as Hyperlink** – Creates a hyperlink to the source information in the spreadsheet.
 - **As Picture** – Provides the option of copying a portion of the spreadsheet as a picture rather than text and numbers and then pasting it as a picture.



Using Paste Special

- Copy the cell(s) that have the information, formatting, or other information desired.
- The highlighted cells now have a “marching ant border.” As long as the “ants are marching,” those cells can be pasted with paste or paste special.
- Click in the cell where the information or formatting is to be pasted.
- On the **Ribbon**, click on the **Home** tab.
- In the **Clipboard** group, click on the **Paste** down arrow and choose the type of paste desired.
- In the **Operation** section, choose the operation to be performed with the numbers from the copied section.
 - Choose **None** if no operation is desired.
- **Transpose** causes a row to be pasted as a column or a column to be pasted as a row.
- Click on the **Paste Link** button to create a dynamic link between the copied cells and the destination cells.
- Click on **OK**.



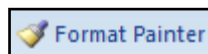
Using Paste > As Picture

- Highlight the cell(s) to be made into a picture.
- On the **Ribbon**, click on the **Home** tab.
- In the **Clipboard** group, click on the **Paste** down arrow and choose **As Picture** → **Copy as Picture...**
- In the **Copy Picture** window, make the desired choices and then click on **OK**.
- Click where the picture is to be pasted.
- On the **Ribbon**, click on the **Home** tab.
- In the **Clipboard** group, click on the **Paste** down arrow and choose **As Picture** → **Paste as Picture...** or **Paste**.



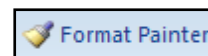
Format Painter

- Click in the cell with the desired formatting.
- On the **Ribbon**, click on the **Home** tab.
- In the **Clipboard** group, click on the **Format Painter** button.
- Click and drag over the cells to be formatted.



Formatting Several Selections

- Click in the cell with the desired formatting.
- On the **Ribbon**, click on the **Home** tab.
- In the **Clipboard** group, double click on the **Format Painter** button.
- Click and drag over the cells to be formatted.
- Click on the **Format Painter** button to turn the tool off.



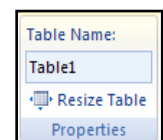
Formatting as a Table

- Sections of a worksheet can be formatted as a table.
- Select the section of the spreadsheet to be formatted.
- On the **Ribbon**, click on the **Home** tab.
- In the **Styles** group, click on the **Format as Table** button and choose a style.
- Click and drag in the spreadsheet to select the area to be formatted as a table.
- Click on **OK**.
- Filters are turned on automatically.
- To turn off the filter,
 - On the **Ribbon**, click on the **Home** tab.
 - In the **Editing** group, click on the **Sort and Filter** button and choose **Filter**.



Naming the Table

- A table can be named for easy access.
- On the **Ribbon**, click on the **Design** tab of the **Table Tools**.
- In the **Properties** group, click in the **Table Name** box and enter a name.
- The name of the table can only contain letters and numbers and cannot contain spaces.
- Press the **Enter** key.



Navigating to the Table

- Click in the **Name Box** on the left end of the **Input Line**.
- Enter the name of the table and then press the **Enter** key.



Table Styles

- Click in the table.
- On the **Ribbon**, click on the **Design** tab of the **Table Tools**.
- In the **Table Styles** group, place the cursor over a style to see the results.
- Click on the **Up** button, the **Down** button, or the **More** button to see additional choices.
- Click on the desired style.

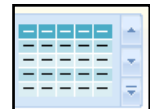
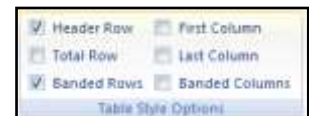


Table Style Options

- Click in the table.
- On the **Ribbon**, click on the **Design** tab of the **Table Tools**.
- In the **Table Style Options** group, click to add or remove options.



Converting the Table to a Normal Range

- Click in the table.
- On the **Ribbon**, click on the **Design** tab of the **Table Tools**.
- In the **Tools** group, click on the **Convert to Range** button.
- In the window, click on **Yes**.



Dynamic Links

- A dynamic link causes the information in the original cell to be displayed in the second cell.
- Click in the cell where the information should be seen.
- Type an equal sign (=).
- Move to the location of the original information and click in that cell.
- Press the **Enter** key.

Pasting a Link

- Click in the cell with the information.
- On the **Ribbon**, click on the **Home** tab.
- In the **Clipboard** group, click on the **Copy** button.
- Move to the location where the information should be seen.
- In the **Clipboard** group, click on the **Paste** down arrow and choose **Paste Link**.



Formulas

Entering Formulas

- Click in the desired cell.
- On the **Ribbon**, click on the **Formulas** tab.
- In the **Function Library** group, click on the down arrow to the right of the **Auto Sum** button.
- Choose the appropriate function.
- **Note** – The marching ants indicate the cells included in the formula.
- Press the **Enter** key.

Writing a Formula

- Click in the cell where the formula should go.
- Type an equals sign (=).
- Select cells to be included by clicking and dragging.
- Enter the proper operations
- Press the **Enter** key.

Order of Operations

- To be sure to get the desired results, use the proper order of operations.
- A mnemonic to remember the order is: **Please Excuse My Dear Aunt Sally**.
 1. **Please** (Parenthesis) - Things contained in parenthesis.
 2. **Excuse** (Exponents) - Exponential calculations.
 3. **My** (Multiplication) **Dear** (Division) - Multiplication or division. (A combination of these reads from left to right.)
 4. **Aunt** (Addition) **Sally** (Subtraction) - Addition or subtraction. (A combination of these reads from left to right.)

Entering More Complex Formulas

- Click in the cell where the function is to be placed.
- On the **Ribbon**, click on the **Formulas** tab.
- In the **Function Library** group, click on the **Insert Function** button.
- Find the desired function in the list of the **Insert Function** window.
- Click on **OK**.
- Choose or enter the necessary information for the function.
- OR click on the **Insert function** button on the **Input Line**.



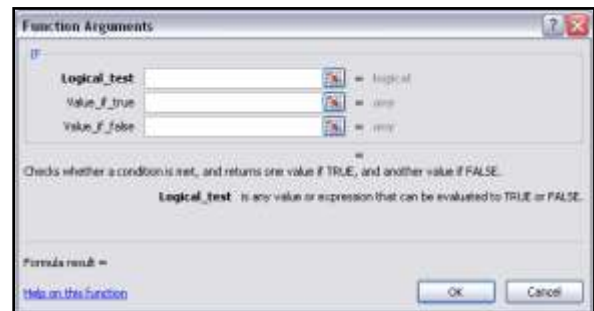
Finding a Formula

- Click in the cell where the formula should go.
- On the **Ribbon**, click on the **Formulas** tab.
- In the **Function Library** group, click on the **Insert Function** button.
- In the **Search for a function** box, enter a description of what the function should do.
- Click on the **Go** button.
- Some choices appear in the **Select a function** box.
- Click on one of the functions to see a description in the space below the box.
- Click on the desired function in the **Select a function** box.
- Click on **OK**.



IF Formula

- Click in the cell the formula is to be in.
- On the **Ribbon**, click on the **Formulas** tab.
- In the **Function Library** group, click on the **Insert Function** button.
 - OR click on the **Insert function** button on the **Input Line**.
- Click on **IF** in the **Select a function** box.
- When **IF** is not in the **Select a function** box:
 - In the **Search for a function** box, enter **if**.
 - Click on the **Go** button.
 - Click on **IF** in the **Select a function** box.
- Click on **OK**.
- **Logical Test**
 - The logical test checks the condition to determine if it is true or false.
 - If the cell is empty or contains a 0, it is marked false. If the cell contains a number other than 0, it is marked true.
 - To choose a particular cell, click on the red dot at the end of the box, click on the desired cell, and then press the **Enter** key.
- **Value if true**
 - The content of the cell appears when the logical test is true.
 - Text must be enclosed in double quotes. For example, **“Number is too large”**.
 - To have no text appear, type in double quotes. For example, **“”**.
 - To have the contents of another cell appear, click on the red dot at the end of the box, click on the desired cell, and then press the **Enter** key.
- **Value if false**
 - The content of the cell appears when the logical test is false.
 - Text must be enclosed in double quotes. For example, **“Number is too small”**.
 - To have no text appear, type in double quotes. For example, **“”**.
 - To have the contents of another cell appear, click on the red dot at the end of the box, click on the desired cell, and then press the **Enter** key.
- Click on **OK**.



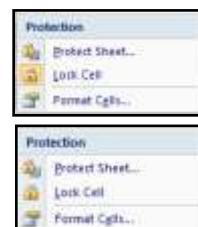
Protecting Cells/Worksheets

What is happening?

- Cells are protected by default.
- The protection does not take effect until the sheet is protected.
- Unlock the cells where the information will be able to be changed.
- Then protect the sheet.

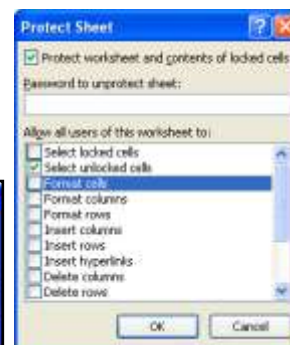
Unlocking Cells

- Highlight the cells to be unprotected.
- On the **Ribbon**, click on the **Home** tab.
- In the **Cells** group, click on the **Format** button and choose **Lock Cells**.
- The **Lock Cells** button is highlighted if the cells are locked.



Protecting the Sheet

- On the **Ribbon**, click on the **Home** tab.
- In the **Cells** group, click on the **Format** button and choose **Protect Sheet...**
- Enter a password if desired. (The password is needed to unprotect the sheet.)
- Select the desired options.
 - Click to remove the check mark in front of **Select locked cells**.
 - Leave the check mark in front of **Select unlocked cells**.
 - Only unlocked cells will be able to be selected.
- Click on **OK**.
- Enter the password again.
- Click on **OK**.



Unprotecting the Sheet

- On the **Ribbon**, click on the **Home** tab.
- In the **Cells** group, click on the **Format** button and choose **Unprotect Sheet...**
- Enter the password.
- Click on **OK**.



Protecting the Workbook

- On the **Ribbon**, click on the **Review** tab.
- In the **Changes** group, click on the **Protect Workbook** button and choose **Protect Structure and Windows**.
- Enter a password. (The password is needed to unprotect the workbook.)
- Select **Structure** to protect the structure of the workbook such as adding, deleting, or unhiding worksheets.
- Select **Windows** to protect the windows of the workbook from being resized.
- Click on **OK**.
- Enter the password again.
- Click on **OK**.
- **Note** – To restrict access to the workbook the **Information Rights Management** client must be installed.



Unprotecting the Workbook

- On the **Ribbon**, click on the **Review** tab.
- In the **Changes** group, click on the **Protect Workbook** button and choose **Protect Structure and Windows** to remove the check mark.
- In the **Unprotect Workbook** window, enter the password.
- Click on **OK**.



Fills

- Using the **Fill Handle** is an effective way to copy or fill information into cells.
- Click in the cell with the information.
- Move the cursor to the bottom right corner of the cell. The cursor changes to a thin plus sign.
- Right click and drag over the cells where the information is to be filled in.
- Choose the desired option:
 - **Copy Cells** fills the cells with an exact copy of the information in the first cell.
 - **Fill Series** fills the cells with a regular series of numbers, days of the week, etc.
 - **Fill Formatting Only** fills the cells with the format of the first cell but not the information.
 - **Fill Weekdays** fills the cells with the days of the week, excluding Saturday and Sunday.
- Linear Trend and Growth Trend take the number in the first cell and fill the cells with a number progression.

Custom Fills

- Click on the **Microsoft Office Button** and then click on the **Excel Options** button at the bottom of the window.
- In the pane on the left, click on **Popular**.
- Under the **Top options for working with Excel**, click on the **Edit Custom Lists** button.
- Type the list into the **List entries** box.
- **Note** - Each item should be on its own line.
- Click on the **Add** button and then click **OK**.



Custom Fill from a List

- Click on the **Microsoft Office Button** and then click on the **Excel Options** button at the bottom of the window.
- In the pane on the left, click on **Popular**.
- Under the **Top options for working with Excel**, click on the **Edit Custom Lists** button.
- Click on the button with the red dot next to the **Import** button.
- Click and drag to highlight the desired list.
- Click on the **Import** button and then click **OK**.

Deleting a Custom List

- Click on the **Microsoft Office Button** and then click on the **Excel Options** button at the bottom of the window.
- In the pane on the left, click on **Popular**.
- Under the **Top options for working with Excel**, click on the **Edit Custom Lists** button.
- In the **Custom Lists** box, click on the list to be deleted.
- Click on the **Delete** button.
- Click on **OK**.

Conditional Formatting

- The cell format can be made to change based on the contents of the cells.
- Click in the cell to be formatted.
- On the **Ribbon**, click on the **Home** tab.
- In the **Styles** group, click on the **Conditional Formatting** button and choose the desired rule or formatting.
 - **Highlight Cell Rules** – Choices include **Greater Than...**, **Less Than...**, **Between...**, **Equal To...**, **Text that Contains...**, **A Date Occurring...**, **Duplicate Values**.
 - **Top/Bottom Rules** – Choices include **Top 10 Items...**, **Top 10%...**, **Bottom 10 Items...**, **Bottom 10%...**, **Above Average...**, **Below Average...**
 - **Data Bars** – Choose color bars to be displayed in the cell.
 - **Color Scales** – Choose color scales to be displayed in the cell.
 - **Icon Sets** – Choose the icon sets to be displayed in the cell.
- Enter the desired information in the window.
- Click on **OK**.

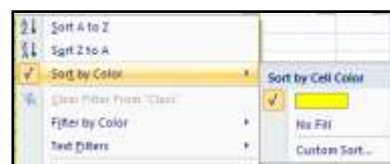


Clearing Conditional Formatting

- Click in the cells with the conditional formatting.
- On the **Ribbon**, click on the **Home** tab.
- In the **Styles** group, click on the **Conditional Formatting** button and choose the **Clear Rules → Clear Rules from Selected Cells**.

Sorting/Filtering by Color

- Lists can be sorted or filtered by color.
- To turn on filtering, on the **Ribbon**, click on the **Home** tab.
- In the **Editing** group, click on the **Sort & Filter** button and choose the **Filter**.
- To sort by color, click on the **Filter** button at the top of the column to be filtered, click on **Sort by Color →** and choose the desired color or no fill.
- To filter by color, click on the **Filter** button at the top of the column to be filtered, click on **Filter by Color →** and choose the desired color or no fill.



Managing Rules

- Click in the cell with the conditional formatting.
- On the **Ribbon**, click on the **Home** tab.
- In the **Styles** group, click on the **Conditional Formatting** button and choose the **Manage Rules...**
- To edit a rule, click on the desired rule and make the desired changes.
- To change the order of the rules, click on the rule to be changed and then click on the **Move Up** button or the **Move Down** button as desired.
- To delete a rule, click on the rule and then click on the **Delete Rule** button.
- To add a new rule, click on the **New Rule** button. Make the desired choices in the **New Formatting Rule** window and then click on **OK**.
- Click on **OK**.



Data Bars

- **Data Bars** provide an instant bar graph in a cell with a number. The bars are automatically scaled to match the range of the cells highlighted.
- Highlight the cells to be formatted.
- On the **Ribbon**, click on the **Home** tab.
- In the **Styles** group, click on the **Conditional Formatting** button, move the cursor over **Data Bars**, and then select the desired color.
- Resize the column to display the data bars at the desired width.



Turning Off Data Bars

- Highlight the cells with data bars.
- On the **Ribbon**, click on the **Home** tab.
- In the **Styles** group, click on the **Conditional Formatting** button, move the cursor over **Clear Rules**, then select **Clear Rules from Selected Cells**.

Color Scales

- **Color Scales** provide a color bar to indicate whether the number in the cell is at the top, in the middle, or at the bottom of the range.
- Highlight the cells to be formatted.
- On the **Ribbon**, click on the **Home** tab.
- In the **Styles** group, click on the **Conditional Formatting** button, move the cursor over **Color Scales**, and then select the desired color scale.

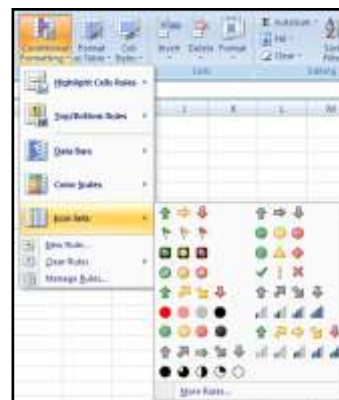


Turning Off Color Scales

- Highlight the cells with color scales.
- On the **Ribbon**, click on the **Home** tab.
- In the **Styles** group, click on the **Conditional Formatting** button, move the cursor over **Clear Rules**, then select **Clear Rules from Selected Cells**.

Icon Sets

- **Icon Sets** provide icons to indicate where the number in the cell is in the range.
- Highlight the cells to be formatted.
- On the **Ribbon**, click on the **Home** tab.
- In the **Styles** group, click on the **Conditional Formatting** button, move the cursor over **Icon Sets**, and then select the desired icon set.



Turning Off Icon Sets

- Highlight the cells with color scales.
- On the **Ribbon**, click on the **Home** tab.
- In the **Styles** group, click on the **Conditional Formatting** button, move the cursor over **Clear Rules**, then select **Clear Rules from Selected Cells**.

Documentation

- Documentation can provide important instructions for:
 1. Other persons who will use the spreadsheet.
 2. The creator of the spreadsheet. We all forget with the passage of time.
- Comments are a great way to provide documentation.

Comments

- A comment is like a sticky note.
- They usually do not print and remain hidden until the cursor is placed over the cell with the comment.
- Cells with comments have a red triangle in the top right corner.

Inserting Comments

- Click in the cell where the comment is to be placed.
- On the **Ribbon**, click on the **Review** tab.
- In the **Comments** group, click on the **New Comment** button.
- Enter the comment. The name of the author can be erased.
- Click away from the comment box when finished.

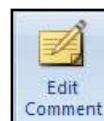


Seeing Comments

- Place the mouse over a cell with a comment and the comment box appears.

Editing Comments

- Click in the cell with the comment.
- On the **Ribbon**, click on the **Review** tab.
- In the **Comments** group, click on the **Edit Comment** button.
- Edit the comment as needed.
- Click away from the comment box when finished.

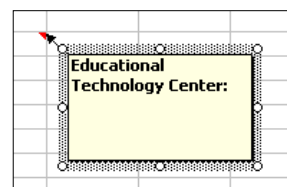


Resizing the Comment Box

- Click in the cell with the comment.
- On the **Ribbon**, click on the **Review** tab.
- In the **Comments** group, click on the **Edit Comment** button.
- Place the cursor over one of the handles (white boxes on the edge). (The cursor is a two-headed arrow.)
- Click and drag to the appropriate size.

Moving the Comment Box

- Click in the cell with the comment.
- On the **Ribbon**, click on the **Review** tab.
- In the **Comments** group, click on the **Edit Comment** button.
- Place the cursor over the edge of the comment box. (The cursor is a four-headed arrow.)
- Click and drag the comment box to the desired location.



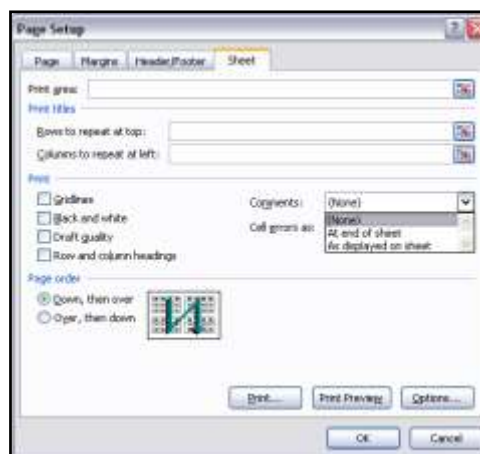
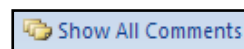
Removing a Comment Box

- Click in the cell with the comment.
- On the **Ribbon**, click on the **Review** tab.
- In the **Comments** group, click on the **Delete** button.



Printing Comments on the Worksheet

- On the **Ribbon**, click on the **Review** tab.
- In the **Comments** group, click on the **Show All Comments** button.
- **Note** - This makes the comments visible on the page.
- On the **Ribbon**, click on the **Page Layout** tab.
- In the **Page Setup** group, click on the **Dialog Launcher** button.
- Click on the **Sheet** tab.
- In the **Print** section, click on the down arrow after **Comments**.
- Choose **As displayed on sheet**.
- Click on **OK** and then print the worksheet.



Printing Comments at the End of the Worksheet

- On the **Ribbon**, click on the **Review** tab.
- In the **Comments** group, click on the **Show All Comments** button.
- **Note** - This makes the comments visible on the page.
- On the **Ribbon**, click on the **Page Layout** tab.
- In the **Page Setup** group, click on the **Dialog Launcher** button.
- Click on the **Sheet** tab.
- In the **Print** section, click on the down arrow after **Comments**.
- Choose **At end of sheet**.
- Click on **OK** and then print the worksheet.

Shapes

Inserting Shapes

- **Shapes** provide decorative elements and places for comments.
- They can also provide a graphic model to clarify information on the spreadsheet.
- On the **Ribbon**, click on the **Insert** tab.
- In the **Illustrations** group, click on the **Shapes** button and choose the desired shape.
 - **Recently Used Shapes**
 - **Lines**
 - **Rectangles**
 - **Basic Shapes**
 - **Block Arrows**
 - **Equation Shapes**
 - **Flowchart**
 - **Stars and Banners**
 - **Callouts**
- In the document, click and drag to create the shape in the desired location.
- Make adjustments to the shape as desired.
- **Note** – If the object has yellow diamonds, these are used to change the proportions of the object.



Adding Text to an Object

- Right click on the object and select **Edit Text**.
- Enter the desired text.
- Use the **Mini** toolbar to change the font, font size, font color, etc.
- Click away from the object.

Moving an Object

- Click on the object and move the cursor to the edge.
- Click and drag the object to the desired location.

Resizing an Shape

- Click on the shape.
- Move the cursor over one of the handles. (The open circles at the corners and the middle of each edge.)
- The cursor will change to a two-headed arrow.
- Click and drag to the desired size.
- **Note** – If the object has yellow diamonds, these are used to change the proportions of the object.

Connecting the Tail of the Callout

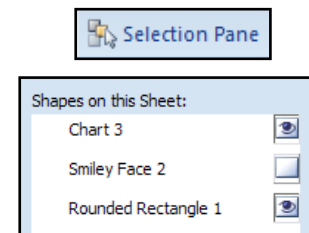
- Click on the callout.
- Notice the yellow diamond at the end of the tail of the callout.
- Click and drag it to the desired location.

Deleting an Object

- Click on the object.
- Press the **Delete** key on the keyboard.

Showing/Hiding Shapes, Charts, and Comments

- Shapes and charts can be hidden or displayed with the click of the mouse.
- On the **Ribbon**, click on the **Page Layout** tab.
- In the **Arrange** group, click on the **Selection Pane** button.
- In the **Selection Pane** on the right, each of the shapes, charts, and comments on the worksheet are listed with the picture of an eye to the right.
- To hide the shape or chart, click on the **eye** icon.
- To show a hidden shape or chart, click on the box where the **eye** icon was.



Data Validation

- Data validation is the process of setting limits that are checked when data is entered.
- Data validation helps ensure the accuracy and usefulness of the data.
- Data can be validated against a list or specific numbers.
- The data can be evaluated as being a whole number, a decimal, a list, a date, a time, a text length, or custom.
- The conditions to choose from include between, not between, equal to, not equal to, greater than, less than, greater than or equal to, and less than or equal to.
- For example, choosing from a list is faster and more accurate than typing in the information.

Creating the List

- In a separate area of the worksheet, create the list.
- The list should run down a column.

Setting up the Cell

- Click in the cell where the list is to be used.
- On the **Ribbon**, click on the **Data** tab.
- In the **Data Tools** group, click on the **Data Validation** button.
- Click on the **Settings** tab.
- Click on the **Allow** box down arrow and choose **List**.
- Click on the button at the end of the **Source** box.
- Highlight the cells with the desired list.
- Press the **Enter** key.
- Click on **OK**.
- If subsequent cells need the same data validation, use the fill feature.



Using the List

- Click in the cell where the list is to be used.
- Click on the down arrow and choose the desired item from the list.

Editing the List

- Make corrections to the list (original list) as needed.
- To add a new item to the list:
 - Right click in a cell in the middle of the list and choose **Insert**.
 - Choose **Shift cells down** and then click **OK**.
 - Enter the information in the cell.
- To delete an item from the list:
 - Right click in the cell to be deleted and choose **Delete**.
 - Choose **Shift cells up** and then click **OK**.



Clearing the Data Validation

- Click in the cell(s) where the list is used.
- On the **Ribbon**, click on the **Page Layout** tab.
- In the **Data Tools** group, click on the **Data Validation** button.
- Click on the **Settings** tab.
- To clear the data validation from all cells with the same setting, click at the bottom of the window to **Apply these changes to all other cells with the same settings**.
- Click on the **Clear All** button.
- Click on **OK**.

Getting Data

- Data can be obtained from a variety of sources.
- Data in a table in a **Word** document can be pasted directly into **Excel**.
- Data which is not organized as a table can be organized into columns if the information on each line is consistently organized and separated by a comma, a tab, or some other marker. Files with commas separating the data are csv files.

Text to Columns

- From a source such as <http://earthquake.usgs.gov/eqcenter/catalogs/>, copy the CSV file information and paste it into an Excel spreadsheet.
- On the **Ribbon**, click on the **Data** tab.
- In the **Data Tools** group, click on the **Text to Columns** button.
- Click to choose **Delimited** as the type of data.
- Click on **Next**.
- In the **Delimiters** section, choose the delimiter such as **Comma**.
- The **Data preview** box shows the data in columns.
- Click on the **Finish** button.



Charts

Using Charts

- Charts can be an effective visual presentation showing a comparison of items, changes over time, parts of a whole, trends, and correlations.
 - **Comparisons, Changes over Time, and Trends** – Use a column chart, a bar chart, a line chart, a cone chart, a pyramid chart, area chart, or surface chart.
 - **Parts of a Whole** - Use a pie chart, a doughnut chart, a stacked column chart, or a stacked bar chart.
 - **Correlations** – Use an X Y (Scatter) chart or a Bubble chart.
 - **Note** – A radar chart shows data from a central point in a circle.

Resizing a Chart

- Click on the chart.
- Place the cursor over an edge of the chart. The cursor changes to a two-headed arrow.
- Click and drag the chart to the desired size.
- **Note** – To maintain the same proportions, hold down the **Shift** key and use the corner to resize the chart.

Chart Tools

- **Chart Tools** are shown in three tabs when a chart is selected.
- **Design** tab – Contains the **Type**, **Data**, **Chart Layouts**, **Chart Styles**, and **Location** groups.
- **Layout** tab – Contains the **Current Selection**, **Insert**, **Labels**, **Axes**, **Background**, **Analysis**, and **Properties** groups.
- **Format** tab – Contains the **Current Selection**, **Shape Styles**, **WordArt Styles**, **Arrange**, and **Size** groups.

Changing the Chart Type

- Click on the chart to select it.
- On the **Ribbon**, click on the **Design** tab of **Chart Tools**.
- In the **Type** group, click on the **Change Chart Type** button.
- Click on the desired chart type in the list on the right.
- Choose the desired chart subtype.
- Click on **OK**.



Switching Rows and Columns

- Switching rows and columns changes the way the data is represented on the chart.
- Click on the chart to select it.
- On the **Ribbon**, click on the **Design** tab of **Chart Tools**.
- In the **Data** group, click on the **Switch Column/Row** button.



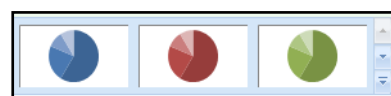
Choosing the Chart Layout

- Click on the chart to select it.
- On the **Ribbon**, click on the **Design** tab of **Chart Tools**.
- In the **Chart Layouts** group, click on the **More** button at the bottom right corner of the **Chart Layouts**.
- Click on the desired layout.



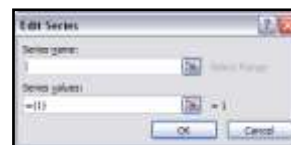
Choosing the Chart Style

- Click on the chart to select it.
- On the **Ribbon**, click on the **Design** tab of **Chart Tools**.
- In the **Chart Styles** group, click on the **More** button at the bottom right corner of the **Chart Styles**.
- Click on the desired style.



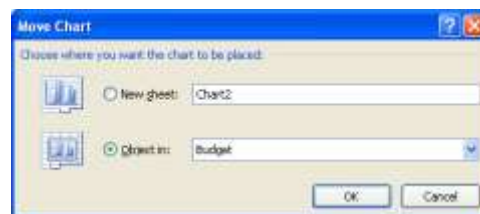
Selecting Data for the Chart

- Click on the chart to select it.
- On the **Ribbon**, click on the **Design** tab of **Chart Tools**.
- In the **Data** group, click on the **Select Data** button.
- To change the range of cells used in the chart:
 - Click on the button with the red dot at the end of the **Chart data range** box.
 - Click and drag to select the desired data.
 - Click on the button with the red dot OR press the **Enter** key.
- To move the **Select Data Source** window, click on the title bar and drag it to the desired location.
- To switch the data in the rows with the columns, click on the **Switch Row/Column** button.
- To add more cells used in the chart:
 - Click on the **Add** button.
 - Click on the button with the red dot at the end of the **Series name** box.
 - Click and drag to select the name (label) for the new data.
 - Click on the button with the red dot OR press the **Enter** key.
 - Click on the button with the red dot at the end of the **Series values** box.
 - Click and drag to select the values (data) for the new part.
 - Click on the button with the red dot OR press the **Enter** key.
 - Click on **OK**.
- To remove a range of cells used in the chart:
 - In the **Legend Entries** box, click on the item to be removed.
 - Click on the **Remove** button.
- Click on **OK**.



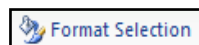
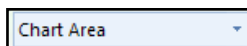
Changing the Chart Location

- The chart can be a picture floating on top of the worksheet, or a separate worksheet.
- Click on the chart to select it.
- On the **Ribbon**, click on the **Design** tab of **Chart Tools**.
- In the **Location** group, click on the **Move Chart** button.
- Click on the desired location.
- Click on **OK**.



Customizing the Chart

- Click on the part of the chart to work with.
- On the **Ribbon**, click on the **Layout** tab of **Chart Tools**.
- In the **Current Selection** group, click on the down arrow of the **Chart Elements** button and choose the desired element of the chart
- **OR** click on the element of the chart to be customized.
- In the **Current Selection** group, click on the **Format Selection** button.
- To move the window, click on the title bar and drag to the desired location.
- In the left pane, click on the attribute of the element to be changed.
- In the right pane, make the desired changes to the element.
- Click on the **Close** button.



Resetting the Chart

- Click on the part of the chart to work with.
- On the **Ribbon**, click on the **Layout** tab of **Chart Tools**.
- In the **Current Selection** group, click on the down arrow of the **Chart Elements** button and choose the desired element of the chart
- **OR** click on the element of the chart to be customized.
- In the **Current Selection** group, click on the **Reset to Match Style** button.

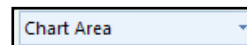


Chart Labels

- Click on the chart to work with.
- On the **Ribbon**, click on the **Layout** tab of **Chart Tools**.
- The **Labels** group contains buttons for working with **Chart Title**, **Axis Titles**, **Legend**, **Data Labels**, and **Data Table**.
- In the **Labels** group, click on the appropriate button and choose the desired option.
- Choosing **More ... Options...** allows for the item to be customized.



Chart Axes

- The horizontal and vertical axes can be easily formatted.
- Click on the chart to work with.
- On the **Ribbon**, click on the **Layout** tab of **Chart Tools**.
- The **Labels** group contains buttons for working with **Axes** and **Gridlines**.
- In the **Axes** group, click on the appropriate button and choose the desired option.
- Choosing **More ... Options...** allows for the item to be customized.



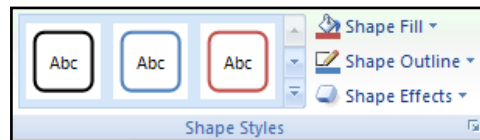
Plot Area

- The chart can be given a background color, gradient, or picture.
- **Note** – The background should be simple so as to not make the chart hard to read.
- Click on the chart to work with.
- On the **Ribbon**, click on the **Layout** tab of **Chart Tools**.
- In the **Background** group, click on the **Plot Area** button and choose the desired option.
- Choosing **More Plot Area Options...** allows for the title to be customized.



Formatting the Chart

- Click on the chart to work with.
- Click on the element of the chart to be formatted.
- On the **Ribbon**, click on the **Format** tab of **Chart Tools**.
- To format a shape:
 - In the **Shape Styles** group, click on the **More** button at the bottom right corner of the **Shape Styles** window.
 - Click on the desired style.
 - **Note** – **Live Preview** in **Office 2007** displays the shape with the style the mouse is hovering over.
 - To change the fill of the shape, in the **Shape Styles** group, click on the **Shape Fill** button and choose the desired fill.
 - To change the outline of the shape, in the **Shape Styles** group, click on the **Shape Outline** button and choose the desired outline.
 - To change the effect of the shape, in the **Shape Styles** group, click on the **Shape Effects** button and choose the desired effect.
- To format text:
 - In the **WordArt Styles** group, click on the **More** button at the bottom right corner of the **WordArt Styles** window.
 - Click on the desired style.
 - **Note** – **Live Preview** in **Office 2007** displays the text with the style the mouse is hovering over.
 - To change the fill of the shape, in the **WordArt Styles** group, click on the **Text Fill** button and choose the desired fill.
 - To change the outline of the shape, in the **WordArt Styles** group, click on the **Text Outline** button and choose the desired outline.
 - To change the effect of the shape, in the **WordArt Styles** group, click on the **Text Effects** button and choose the desired effect.



Pasting a Chart into Word or PowerPoint

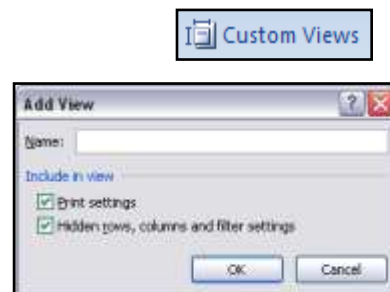
- A chart that is created in **Excel** can be copied and pasted into **Word** or **PowerPoint**.
- Click on the chart to select it.
- On the **Ribbon**, click on the **Home** tab.
- In the **Clipboard** group, click on the **Copy** button.
- Open the **Word** or **PowerPoint** document the chart is to be pasted into.
- On the **Ribbon**, click on the **Home** tab.
- In the **Clipboard** group, click on the **Paste** button.
- The chart is dynamically linked to that changes made in the spreadsheet are immediately communicated to the chart in **Word** or **PowerPoint**.



Custom Views

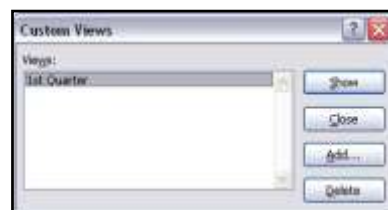
Creating a Custom View

- On the **Ribbon**, click on the **View** tab.
- In the **Workbook Views** group, click on the **Custom Views** button.
- Click on the **Add...** button.
- Enter a name for the view.
- To include printer settings, leave the checkmark in front of **Print settings**.
- To include hidden rows, columns and filter settings, leave the checkmark in front of **Hidden rows, columns and filter settings**.
- Click on **OK**.



Seeing a Custom View

- On the **Ribbon**, click on the **View** tab.
- In the **Workbook Views** group, click on the **Custom Views** button.
- Click on the desired view.
- Click on the **Show** button.



Deleting a Custom View

- On the **Ribbon**, click on the **Page Layout** tab.
- In the **Workbook Views** group, click on the **Custom Views** button.
- Click on the desired view.
- Click on the **Delete** button.
- Click on the **Yes** button to delete the selected view.
- Click on the **Close** button.

Page Layout View

- Page Layout view shows how the pages will be printed without going into Print Preview.
- On the **Ribbon**, click on the **View** tab.
- In the **Workbook View** group, click on the **Page Layout** button.



Returning to Normal

- Click and drag to select the area to be printed.
- On the **Ribbon**, click on the **View** tab.
- In the **Workbook View** group, click on the **Normal** button.

Page Break Preview

- Page Break Preview shows how the pages will be printed without going into Print Preview.
- On the **Ribbon**, click on the **View** tab.
- In the **Workbook View** group, click on the **Page Layout** button.
- Click on **OK** on the window indicating the page breaks can be adjusted by clicking and dragging.
- Blue dotted lines indicate page breaks.
- To adjust a page break, place the cursor over the blue line indicating the page break and drag it to the desired location. (The blue line becomes solid blue.)



Inserting a Page Break

- Click in the cell that is to be the first cell on the new page.
- On the **Ribbon**, click on the **Page Layout** tab.
- In the **Page Setup** group, click on the **Break** button and choose **Insert Page Break**.

Removing a Page Break

- Click in the cell just after or just below the page break.
- On the **Ribbon**, click on the **Page Layout** tab.
- In the **Page Setup** group, click on the **Break** button and choose **Remove Page Break**.

Resetting All Page Breaks

- Resetting all page breaks removes adjustments to the page breaks.
- On the **Ribbon**, click on the **Page Layout** tab.
- In the **Page Setup** group, click on the **Break** button and choose **Reset All Page Break**.

Print Area

- Setting the print area tells the computer to print just the selected part of the spreadsheet.

Setting the Print Area

- Click and drag to select the area to be printed.
- On the **Ribbon**, click on the **Page Layout** tab.
- In the **Page Setup** group, click on the **Print Area** button and choose **Set Print Area**.



Clearing the Print Area

- Click in the spreadsheet.
- On the **Ribbon**, click on the **Page Layout** tab.
- In the **Page Setup** group, click on the **Print Area** button and choose **Clear Print Area**.

Printing Multiple Worksheets

- Click on the tab of the first worksheet to be included.
- Hold down the **Control** key and click on each additional worksheet that is to be printed.
- Click on the **Microsoft Office Button** and choose **Print** → **Print Preview**.
- Check the pages to be sure they will print as desired.
- Click on the **Print** button.
- To release the grouping of the sheets, click on a sheet tab not in the group.



Multiple Page Printouts

Titles Repeated on Every Page

- Close **Print Preview**.
- On the **Ribbon**, click on the **Page Layout** tab.
- In the **Page Setup** group, click on the **Print Titles** button.
- Click on the **Sheet** tab.
- Click on the red arrow at the right of **Rows to repeat at top**.
- Click in the row with the headers you want repeated.
- Press the **Enter** key.
- Click on the red arrow at the end of the **Columns to repeat at left**.
- Click in the column with the headers you want repeated.
- Press the **Enter** key.
- Click on **OK**.



Saving as PDF

- To save or export a file to PDF, you must first install the **Save as PDF add-in** from the Microsoft Office website.
 - Go to <http://www.microsoft.com>
 - Type **PDF** in the search box located in the upper right corner.
 - Click on the result that says: **Download details: 2007 Microsoft Office Add-in:...**
 - Click on the **Continue** button next to “Validation required.”
 - After your computer has been validated, click on the **Download** button.
 - Click on **Run**.
 - Click on **Run**.
 - Check the box to **Accept the Microsoft Software License Terms**.
 - Click on **Continue**.
 - Click on **OK**.
- Once the PDF add-in has been installed to the computer, open the document that needs to be converted to PDF.
- Click on the **Microsoft Office Button**, place the cursor over **Save As...**, and click on **PDF**.
- Navigate to the location where the PDF document will be saved.
- (Optional) Type in a file name.
- Click on the **Options** button.
- Make choices in the **Options** window to determine what part of the spreadsheet will be included in the pdf.
 - Click on **OK**.
 - Click on **Save**.

